LIST OF LIGHTS

ON THE

NORTHERN LAKE AND RIVER COASTS

OF THE

UNITED STATES,

CORRECTED TO JANUARY 1, 1871;

AND ALSO OF

THE ENGLISH LIGHTS

ON THE

NORTHERN SHORES OF THOSE WATERS.

LIGHT-HOUSE BOARD OF THE UNITED STATES.

Organized in conformity to the act of Congress approved August 31, 1852.

LIST OF MEMBERS.

Hon. GEORGE S. BOUTWELL, *Secretary of the Treasury, ex-officio President.*
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Major GEORGE H. ELLIOT, *Corps of Engineers.*

MEMBERS OF THE BOARD EMPLOYED IN THE OFFICE.

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Rear-Admiral THORNTON A. JENKINS, *United States Navy, Naval Secretary.*
Major GEORGE H. ELLIOT, *Corps of Engineers, Engineer Secretary.*

LIST OF LIGHT-HOUSE DISTRICTS AND LOCAL OFFICERS.

Districts.	Limits of districts.	Inspectors.	Headquarters.	Engineers.	Headquarters.
Third	Extending from Gooseberry Point, Massachusetts, to include Squam Inlet, New Jersey, as well as Lake Champlain and Hudson River.	James H. Strong, Commodore, United States Navy.	New York City	Brevet Brigadier General I. C. Woodruff, Lieutenant Colonel of Engineers, United States Army.	Tompkinsville, Staten Island, N. Y.
Tenth	From the mouth of St. Regis River, to include the Grassy Island Light-House, in Detroit River.	G. H. Scott Commodore, United States Navy.	Buffalo, N. Y.	Brevet Lieutenant Colonel George L. Gillespie, Captain of Engineers, United States Army.	Buffalo, N. Y.
Eleventh	Embracing all aids to navigation above Grassy Island Light-House, Detroit River.	Alexander Murray, Captain, United States Navy.	Detroit, Mich.	Brevet Brigadier General O. M. Poe, Major of Engineers, United States Army.	Detroit, Mich.

LIST OF COLLECTORS OF CUSTOMS ACTING AS SUPERINTENDENTS OF LAKE LIGHTS.

G. J. Stannard.....Burlington, Vermont.
William Emerson.....Rochester, New York.
Charles C. P. Clark.....Oswego, New York.
T. E. Ellsworth.....Suspension Bridge, New York.
R. W. Daniels.....Buffalo, New York.
S. P. Remington.....Ogdensburg, New York.
Jacob Parmerter.....Plattsburg, New York.
David B. Owen.....Cape Vincent, New York.
S. M. Matteson.....Dunkirk, New York.
Richard F. Gaggin.....Erie, Pennsylvania.
John Youngs.....Sandusky, Ohio.
P. S. Slevin.....Toledo, Ohio.
P. G. Watmough.....Cleveland, Ohio.
George Jerome.....Detroit, Michigan.
Hiram A. Burt.....Marquette, Michigan.
Samuel T. Hooker.....Milwaukee, Wisconsin.
James E. McLean.....Chicago, Illinois.
H. C. Akeley.....Grand Haven, Michigan.
John P. Sanborn.....Port Huron, Michigan.

TO MARINERS.

TREASURY DEPARTMENT,
OFFICE LIGHT-HOUSE BOARD, *Washington City, January* 1, 1871.

Mariners and others interested in commerce, and the preservation of life and property from loss by shipwreck on the coasts of the United States, are earnestly requested to give prompt information to the Inspectors or Superintendents of Lights, or, by direct communication to the Light-House Board, of cases in which lights are not lighted punctually at sunset and extinguished at sunrise, or in which they are not properly attended to during the night, or in which light-vessels or buoys are out of position, and of all cases in which the published instructions are not strictly complied with, that the Board may, with as little delay as possible, apply the proper remedy, and prevent neglect of duty on the part of persons connected with the lights, beacons, and buoys of the United States.

LIGHTS ON NORTHWESTERN LAKES.

TIME OF EXTINGUISHING IN THE WINTER AND RE-EXHIBITING THEM IN THE SPRING.

All lights of the United States in the river St. Lawrence, and on Lakes Ontario, Erie, St. Clair, Huron, Michigan, Champlain, and Superior, and their contiguous bays, &c., will be discontinued on the first day of January of each year, unless otherwise specially directed; and upon the opening of navigation in the localities above named, in each year, the light-keepers of the respective lights will exhibit the lights from sunset to sunrise of each night, as soon as it is practicable for vessels to enter the ports at or near which the lights are situated. The keepers of lights situated on islands on the Lakes will be governed, in exhibiting their lights on the opening of navigation in the spring of each year, by the action of the keepers on the mainland.

Light-keepers will be careful to note on their journals and quarterly returns the day on which their lights are exhibited upon the opening of navigation in the spring, and to conform strictly to the terms of the foregoing notice.

REMOVING BUOYS IN THE FALL AND RESTORING THEM IN THE SPRING.

The buoys on the Lakes and adjacent navigable waters will be removed each year upon the closing of the navigation of the respective localities, and replaced in the spring as soon as the ice will permit.

TREASURY DEPARTMENT,
Office Light-House Board.

NOTES AND REFERENCES.

The lights of the United States are arranged in their regular geographical order from East to West, commencing at the first light nearest to the northeastern boundary, and following the sea-coast to the entrances of the sounds, bays, rivers, &c. The lights of each estuary are arranged in regular order from the sea to the head of navigation under separate references; after which the next sea-coast light will be found in its order. In some instances sea-coast lights have been repeated for convenience of reference.

The lights on the Northern Lakes are arranged in the order of location, commencing on Lake Champlain and proceeding westward.

The names of the lights are printed as follows, viz:

1. PRIMARY LAKE-COAST LIGHTS.
2. Harbor lights.

In the column of "Distance visible in statute miles" will be found the distances at which the lights can be seen, under ordinary states of the atmosphere, by observers at elevations of fifteen feet above the level of the sea. The courses given are *true*, and must be corrected by masters of vessels for *magnetic variation*.

REFERENCES.

F.....Fixed or steady light.
F. R.....Fixed red light.
Flg.....Flashing light.
F. V. F.....Short eclipse, or fixed light varied by flashes.
F. & R. Flg. Fixed white light, with red flashes.

Rev'g.....Revolving light.
Mag. Var...Magnetic variation.

N. North; S. South; E. East; W. West.

Colored lights are specially noted by small CAPITALS in column of remarks.

[⊙ 1] First order lens apparatus.
[⊙ 2] Second order lens apparatus.
[⊙ 3] Third order lens apparatus.
[⊙ 4] Fourth order lens apparatus.
[⊙ 5] Fifth order lens apparatus.
[⊙ 6] Sixth order lens apparatus.

NEW YORK AND VERMONT.

Number.		Name.	Location.	Latitude.	Longitude.	Number of lights and relative positions.	Fog signal.	Fixed or revolving, &c.	Interval of flash.
				N. ° ′ ″	W. ° ′ ″				m. s.
416	WHITEHALL NARROWS.	Benjamin's Place, No. 1.	Two miles from White Hall, Dresden, N. Y.			1		F	
417		Carey's Camp, No. 2.	Half a mile north of Benjamin's Place.			1		F	
418		Opposite Chapman's Dock, No. 3.	About four miles from White Hall, Dresden, N. Y.			1		F	
419		South of Snoddy's Dock, No. 4.	One mile from No. 3			1		F	
420		Steam Mill Point, No. 5.	Three-quarters of a mile north of No. 4, Dresden, N. Y.			1		F	
421		Long Beach, No. 6	Half a mile north of No. 5			1		F	
422		Head of Two Channels, No. 7.	Half a mile north of No. 6, Dresden, N. Y.			1		F	
423		Maple Bend, No. 8	Three-quarters of a mile north of No. 7, Dresden, N. Y.			1		F	
424		Lower end of Two Channels, No. 9	One-half of mile north of No. 8, Dresden, N. Y.			1		F	
425		Cold Spring, No. 10	One mile north of No. 8			1		F	
426		Chilson's Bend, No. 11.	Half a mile north of No. 9			1		F	
427		Opposite Belden's Dock, No. 12.	Half a mile north of No. 11			1		F	
428		Above Pulpit Point, No. 13.	One-half mile north of No. 12.			1		F	
429		Pulpit Point, No. 14	One-fourth mile north of No. 12.			1		F	
430		Lower end of Four Channels and Narrows, No. 15.	One and one-quarter mile north of No. 14.			1		F	
431		Old Maid's Place, No. 16.	Three-fourths of a mile north of No. 15.			1		F	
432	LAKE CHAMPLAIN.	Crown Point	On Crown Point, west side of Lake Champlain, N. Y.	44 03 00	73 28 17	1		F	
433		Barber's Point				1			
434		Split Rock	Near Essex, west side of Lake Champlain, N. Y.	44 12 00	73 18 00	1		F	
435		Juniper Island	On Juniper Island, south side of entrance to Burlington harbor, Vt.	44 27 00	73 13 00	1	A bell struck by machinery, and a horn sounded at intervals of five minutes.	F	
436		Burlington Beacon.	One on each end of Burlington breakwater, Vt.			1		F	
437		Burlington Beacon.				1		F	
438		Colchester Reef	Off Colchester Point, Vt			1			
439		Bluff Point	On Valcour Island, Vt			1			
440		Plattsburg Beacon.	One on each end of Plattsburg breakwater.			1		F	
441		Plattsburg Beacon.				1		F	
442		Cumberland Head	Near Plattsburg, west side of Lake Champlain, N. Y.	44 42 00	73 20 00	1		F	
443		Point au Roche	On the shoe at Point au Roche, in Lake Champlain, N. Y.	44 47 53	73 20 11	1		F	
444		Isle la Motte	On north end of Isle la Motte, Vt.			1		F	
445		Windmill Point	On Windmill Point, Vt., opposite Rouse's Point, N. Y.	44 58 58	73 20 11	1		F	
446	ST. LAWRENCE RIVER.	Ogdensburgh	Near the mouth of the Oswegatchie River, in St. Lawrence River.	44 45 00	75 30 10	1		F	
447		Cross-over Island	On Cross-over Island, St. Lawrence River.			1		F	
448		Sister Islands	On Sister Islands, St. Lawrence River.			1		F	
449		Sunken Rock	On Bush or Sunken Rock Island, in St. Lawrence River.			1		F	
450		Rock Island	In St. Lawrence River			1		F	
451		Tibbett's Point	On the southeast side of the entrance to St. Lawrence River.	44 09 00		1		F	
452	LAKE ONTARIO.	Galloo Island	On the west point of Galloo Island, N. Y.	43 51 00	76 26 30	1		F	
453		Sackett's Harbor	On the west end of Horse Island, and west of Sackett's Harbor, N. Y.	43 56 30	76 08 10	1		F	

NOTE.—All distances given in this list are in statute miles.

NEW YORK AND VERMONT.

Number.	Distance visible in statute miles.	Color of tower or vessel.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks.
										Fixed or revolving, &c. / Interval of flash. m. s.
416	9	Black		18	Lens lantern.	1856	1869			Portable beacon.
417	9	Red		18	Lens lantern.	1856	1869			Do.
418	9	White stake		15	Lens lantern.	1856	1869			A stake light.
419	9	White stake		15	Lens lantern.	1856	1869			Do.
420	9	Red		15	Lens lantern.	1856	1869			Portable beacon.
421	9	Red		18	Lens lantern.	1856	1869			Do.
422	9	R. & B., H. S.		18	Lens lantern.	1856	1869			Portable beacon; three red and black horizontal bands; center black; upper and lower red.
423	9	Red		18	Lens lantern.	1866	1869			Portable beacon in the marshy "narrows" at the head of Lake Champlain.
424	9	R. & B., H. S.		18	Lens lantern.	1856	1869			Portable beacon; three black and red horizontal bands; center red; upper and lower black.
425	9	Black		18	Lens lantern.	1856	1869			Portable beacon.
426	9	Red		18	Lens lantern.	1856	1869			Do.
427	9	Black		18	Lens lantern.	1856	1869			Do.
428	9	Black		18	Lens lantern.	1856	1869			Do.
429	9	Red		18	Lens lantern.	1856	1869			Do.
430	9	Black		18	Lens lantern.	1856	1869			Do.
431	9	Red		18	Lens lantern.	1869				Do.
432	16	Dark blue	55	85	[⊙ 5]	1858				Tower of limestone, with keeper's dwelling of wood, connected by a covered way.
433										To be built.
434	17	Dark blue	32	100	[⊙ 4]	1838	1867			Tower of limestone, with keeper's dwelling of wood, connected by a covered way.
435	17	White	30		[⊙ 4]	1846		1856		Iron tower painted white.
436	10	White		21	[⊙ 6]	1857				Two wooden beacons on breakwater.
437	10			21	[⊙ 6]					
438										Building.
439										To be built.
440	10	White		32	[⊙ 6]	1867				Two wooden beacons on breakwater.
441	10			32	[⊙ 6]					
442	14	Dark blue	36	55	[⊙ 4]	1837	1867			A tower and keeper's dwelling of limestone, connected by a covered way.
443	14	Gray	50	54	[⊙ 6]	1858				A tower of limestone; keeper's dwelling of wood.
444	12	Dark blue	18	39	[⊙ 6]	1857				
445	13	Dark blue	40	52	[⊙ 6]	1858				
446	11	White	27	30	[⊙ 4]	1834	1870		S.W. by W. by N'd and W'd to N.E. by E.	Tower, with dwelling attached, built of limestone on a low island one-fourth of a mile N. by W. of the mouth of the river. A shoal extends out northerly from the island.
447	12	White	25	37	[⊙ 4]	1847		1855	S. by W. by W'd and N'd to E. by S.	River light, light on keeper's dwelling of brick. Crossover Island is on the north side of the channel, and 20 miles S.W. from Ogdensburg.
448	12	Gray	40	43	[⊙ 6]	1870			Entire horizon	
449	11	White	28	31	[⊙ 6]	1847		1855	S. S.W. by W. and N. to E. by S.	River light; frame beacon whitewashed on pier of protection on Bush Island or shoal ¼ mile north Alexandria Bay.
450	12	White	27	30	[⊙ 6]	1847		1855	S.W. by S. by W'd and N'd to E. by S.	River light; keeper's dwelling of brick, with light on top. Bears from Alexandria Bay S. by W., distant about 7 miles.
451	15	White	47	67	[⊙ 4]	1827	1854		N.E. ¼ E. by N'd to S.S.W. ½ W.	Lake-coast and river light; brick dwelling connected with brick tower by covered way; whitewashed; Galloo Island S. by W. 19 miles; Charity Island Day Beacon S.W. by W., distant 8 miles; Pigeon Island W. ½ S., distant 10 miles.
452	14	Gray	55	62	[⊙ 4]	1820	1866		N.E. by N'd and W'd to E.	Lake-coast light; tower and dwelling of limestone, connected by covered way. A shoal lies N. by W., distant 1 mile, and marked by a buoy.
453	12	White	31	42	[⊙ 5]	1831	1870		S. ½ W. by N'd and W'd to E. by N.	Sackett's Harbor, N. Y. Dwelling with tower attached of brick. The island (which contains about 27 acres) is on the south side of entrance to harbor, one and half a mile west of Sackett's Harbor, and is connected with the mainland by a narrow spit visible at low water.

NEW YORK AND VERMONT—Continued.

Number.		Name.	Location.	Latitude.	Longitude.	Number of lights and relative positions.		Fog signal.	Fixed or revolving, &c.	Interval of flash.
				N. ° ′ ″	W. ° ′ ″					m. s.
454	LAKE ONTARIO.	Stony Point	On Stony Point, N. Y.	43 51 00	76 18 00	1			F. V. F.	2.00
455		Oswego	Near the end of west pier, at the entrance to Oswego harbor, N. Y.	43 28 00	76 30 00	1			F	
456		Pier Head				1			F	
457		Big Sodus Beacon, front.	Erected on remaining part of the pier.			1	280 feet part.		F	
458		Big Sodus Beacon, rear.				1			F	
459		Big Sodus Bay	At Sodus Point, west side of Sodus harbor, N. Y.	43 17 00	77 00 00	1			F. V. F.	2.00
460		Genesee	West side of entrance to Genesee River, N. Y.	43 15 30	77 36 00	1			F	
461		Genesee Beacon	On end of west pier, at entrance to Genesee River, N. Y.	43 16 00	77 35 00	1			F	
462		Oak Orchard				1				
463		Niagara Fort	At the junction of Niagara River and Lake Ontario, N. Y.	43 15 00	79 03 00	1			F	
464	LAKE ERIE.	Horse-shoe Reef	On Horse-shoe Reef, at the entrance to Niagara River.			1		A horn sounds at intervals of 5 minutes.	F. V. F.	1.30
465		Buffalo Breakwater, north end.				1				
466		Buffalo Breakwater, south end.				1				
467		Buffalo	Near the end of south pier head at junction of Buffalo Creek and Lake Erie, N. Y.	42 53 00	78 56 00	1		A bell struck at intervals of 10 seconds.	F	
468		Dunkirk	At Dunkirk, on the southeast shore of Lake Erie, N. Y.	42 29 45	79 22 20	1		A bell	F. V. F.	1.30
469		Dunkirk Beacon	On pier west side of entrance to Dunkirk Harbor, N. Y.	42 30 00	79 21 52	1			F	

PENNSYLVANIA AND OHIO.

470	LAKE ERIE.	Erie Harbor	South shore of Lake Erie; marks the approach to eastern entrance to Presqu'ile Bay, and about one mile to the N'd and E'd of Erie, Pa.	42 08 43	80 04 16	1			F	
471		Presqu'ile Beacon Range, No. 1.	On east end of north pier, on the north side of entrance to Presqu'ile Bay, Erie, Pa.	42 09 17	80 05 08	1			F	
472		Presqu'ile Beacon Range, No. 2.	On west end of north pier			1			F	
473		Peninsula Beacon Range, No. 1.	On the peninsula, northwest of north pier.			1			F	
474		Peninsula Beacon Range, No. 2.				1			F	
475		Conneaut	End of east pier, at mouth of Conneaut River, Ohio.	41 59 05	80 32 30	1			F	
476		Ashtabula	On the east pier, at the entrance to Ashtabula River, Ohio.	41 54 50	80 47 00	1			F. V. F.	2.00

NEW YORK AND VERMONT—Continued.

Number.	Distance visible in statute miles.	Color of tower or vessel.	Height of tower from base of focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks.
454	12	Gray	33	43	[⊙ 5]	1837	1869	.....	S. S.W. by W'd to N.E.	Lake coast light; tower and dwelling attached; limestone; shore rocky and dangerous, and can only be approached in small boats in smooth weather. Oswego light S. by W. 35 miles.
455	15	Gray	66	72	[⊙ 3]	1837	1869	.....	.....	Lake coast and harbor light; keeper's dwelling ashore; frame; tower and oil-room attached, of limestone, on west pier of entrance, five hundred (500) feet from pier head. Pier head marked by a hanging lantern that runs on wire stretched from main light to top of mast fixed in the pier head.
456	.....	Spar	.....	.....	Lantern	1870	.....	.....	.....	
457	9	.....	8	.....	[⊙ 6]	1858	1870	.....	.....	The lights are placed in two small frame towers on the west pier of the entrance; both lights are white. Range for entering the harbor and to keep clear of the old west pier head.
458	10	.....	18	.....	[⊙ 6]	1858	1870	.....	.....	
459	15	White	45	68	[⊙ 4]	1825	1870	.....	.....	Lake coast light; tower and dwelling attached; two stories; dark gray limestone; situated on bluff one mile west of entrance piers to harbor.
460	16	White	37	81	[⊙ 4]	1822	1858	.....	.....	Tower of rubble masonry, whitewashed, with keeper's dwelling of brick attached by covered way; natural color.
461	11	White	23	28	[⊙ 6]	1822	.....	1855	.....	Frame structure placed about 100 feet from head of west pier.
462	.....	.....	.....	.....	.....	.....	.....	.....	.....	
463	16	White	44	78	[⊙ 4]	1813	.....	1867	.....	Building.
464	13	White	50	50	[⊙ 4]	1856	.....	.....	Entire horizon	Light on mess-house, Fort Niagara.
465	.....	.....	.....	.....	[⊙ 6]	.....	.....	.....	Entire horizon	Harbor and river light. An elevated iron beacon, with keeper's dwelling on masonry pier of protection, with lo guard on N. and W. faces, built upon Horseshoe Reef Shoal, forming southern end of middle reef which separates Canadian from Emerald channel. It bears S. 30° E. from Fort Erie, Canada, and from Buffalo light W. by N. 5°. Fog horn sounds every five minutes during foggy weather.
466	.....	.....	.....	.....	[⊙ 6]	.....	.....	.....	Entire horizon	Building.
467	15	Gray	51	65	[⊙ 3]	1828	.....	1857	N. by W. ½ W. W'd to S. by E. ½ E.	Authorized.
468	16	White	50	87	[⊙ 3]	1837	1857	869	E. N.E. N'd to S. W. ½ W	Lake-coast and harbor light; tower and dwelling of brick connected by covered way, whitewashed, situated on bluff ½ mile west of entrance to harbor.
469	12	White	25	40	[⊙ 6]	1837	.....	1844	N. E. by N. ½ N. N'd to W. by N.	Harbor light; frame beacon, whitewashed, on pier of protection at pier head of west pier of entrance to harbor channel two hundred (200) feet wide. On west side near beacon dangerous rocks outcrop, with 8 or 9 feet of water, and on the east (inside) lies the ruins of an old breakwater with 10 feet of water.

PENNSYLVANIA AND OHIO.

Number.	Distance visible in statute miles.	Color of tower or vessel.	Height of tower from base of focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks.
470	12	Gray	60	128	[⊙ 3]	1898	1867	.....	E. N. E. N'd to W. by S.	Lake-coast and harbor light; tower and oil room attached of light-colored sandstone; dwelling detached; of brick; marks approach to Erie Harbor; shore line obscured for a distance of three hundred (300) yards.
471	13	White	30	38	[⊙ 5]	1837	.....	.....	N. ½ E. W'd to W. S. W.	Harbor light. Cast-iron tower on pier of protection near east pier head of north pier of entrance to harbor channel between piers two hundred (200) feet wide, giving thirteen (13) feet of water. The light is obscured from Peninsula Point round by W. to near line of north pier produced inside of harbor.
472	7	White	4	8	[⊙ 6]	1856	1869	.....	E. ½ N. S'd to N. by W	Octagonal frame tower, painted white, and dome red, on west end of north pier, arc, 212°. The two lights on the north pier form a range for entering harbor, and their intersection with the two on the Peninsula north of the north pier marks the channel across the bar inside of the pier.
473	7	White	7	10	[⊙ 6]	1856	1869	1870	W. ½ S. S'd to S. W. by S. ½ S.	Presque Isle Peninsula beacon range lights; white masts with red boxes, showing lights only along the range on the inside of piers, illuminating an arc of 60°.
474	7	White	11	10	[⊙ 6]	1856	1869	1870		
475	12	White	34	41	[⊙ 6]	1835	1858	.....	E. N. E. N'd to W. by S. ½ S.	Harbor light; frame beacon, whitewashed, on pier of protection behind east pier of entrance to harbor.
476	12	White	38	42	[⊙ 5]	1835	1858	.....	E. N. E. N'd to W. S. W.	Harbor light; frame beacon, whitewashed, on pier of protection, on east pier of entrance to harbor. No dwelling.

PENNSYLVANIA AND OHIO—Continued.

No.		Name.	Location.	Latitude. N.	Longitude. W.	Number of lights and relative positions.	Fog signal.	Fixed or revolving, &c.	Interval of flash.
				° ′ ″	° ′ ″				m s.
[illegible]		Fairport	At Fairport, on the east side of the mouth of Grand River, Ohio.	41 45 20	81 41 41	1	.....	F	....
[illegible]		Grand River Fairport Beacon.	At Fairport, on the east side of the mouth of Grand River, Ohio.	41 45 45	81 45 45	1	.....	F	....
[illegible]		...	On the left, east of the entrance to Grand River, Ohio.	41 30 08	81 42 22	1	.....	F	...
[illegible]	Lake Erie	...	On the pier at the entrance of Vermilion Harbor, Ohio.	41 30 17	81 43 01	1	.....	F V R F	0 50
[illegible]		Cleveland Lighthouse No. 2.	.....	.....	.....	1	.....	F	..
[illegible]		Rocky River	On the west pier at the mouth of Black River, Ohio.	41 28 40	82 08 45	1	.....	F	..
[illegible]		...	On the west pier at the entrance to Huron Harbor, Ohio.	41 26 09	82 20 45	1	.....	F	....
[illegible]		Huron	At the south of Huron River, Ohio, on the west pier.	41 24 01	82 32 20	1	.....	F	..

OHIO AND MICHIGAN.

[illegible]		[illegible]	On Cedar Point, east side of the entrance to Sandusky Bay, Ohio.	41 29 13	82 41 09	1	.....	F	....
[illegible]		[illegible]	...	.....	.....	1	.....	F	....
[illegible]		Marblehead	On Marble Head, north side of Sandusky Bay, Ohio.	41 32 30	82 42 55	1	.....	F	....
[illegible]		[illegible]	[illegible] Green Island, Lake Erie.	41 32 45	82 51 25	1	.....	F V F	2 00
[illegible]	Lake Erie	[illegible]	On the west end of Middle Sister Island, Lake Erie.	41 41 15	83 01 [illegible]	1	.....	F	.
[illegible]		[illegible]	At the entrance to Maumee Bay, Ohio.	41 45 12	83 22 54	1	.....	F	
[illegible]		[illegible]	[illegible] River	.....	.....	1	1,000 ft apart	F	..
[illegible]		[illegible]	...	.....	.....	1	N. 84° 56′ W.	F	.
[illegible]		[illegible]	[illegible] Maumee River, Ohio.	.....	.....	1	1,000 ft	F	.
[illegible]		[illegible]	...	.....	.....	1	N. 19° E. W.	F	.
[illegible]		[illegible]	[illegible] Maumee River, Ohio.	.....	.....	1	1,000 ft apart	F	.
[illegible]		[illegible]	...	.....	.....	1	N. 35° [illegible]	F	.
[illegible]		[illegible]	[illegible] River, Ohio.	[illegible]	[illegible]	1	.....	F	.
[illegible]	Detroit River	[illegible]	[illegible]	[illegible]	[illegible]	1	.....	F	....
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	1	.....	F	...
		Grosse Isle	On Grassy Island in Detroit River.	[illegible]	[illegible]		.....	F	.
[illegible]		Windmill Point	On Windmill Point, west side of Detroit River, at the head of Lake St. Clair.	[illegible]	[illegible]	2	.....	Fixed White varied by red flashes	1 30
[illegible]	Lake St. Clair	[illegible]	At the head of Lake St. Clair, on the [illegible] shoal, [illegible]	[illegible]	[illegible] 0	1	1,900 feet apart. N. 56° E. S. 56° W.	F	....
[illegible]		Beacon	In front of [illegible], to form a range in passing through the old artificial channel.		.....	1	.....	F	..

PENNSYLVANIA AND OHIO—Continued

Number	Distance visible in statute miles	Color of tower or vessel	Height of tower from base to focal plane	Height of light above sea level	Order of lens	When built	When rebuilt	When refitted	Compass-range of [illegible]	[illegible]
477	17	White	60	100	[⊙ 3]	1825	1858	.....	N. E. by E. ½ E. N'd to W. ½ S.	Lake-coast and harbor light; stone tower with attached dwelling in course of construction, situated on bluff on east bank of Grand River, ½ mile from its mouth.
478	11	White	21	27	[⊙ 6]	1835	....	1867	E. by N. N'd to W. by S.	Harbor light; frame beacon, white washed, on pier of protection behind east pier of entrance to harbor.
479	19	White	56	135	[⊙ 3½]	1829	.....	1850	N. E. ½ E. N'd to W. ½ N.	Lake-coast and harbor light, situated on hill in the city of Cleveland, east of entrance to Cuyahoga River.
480	13	White	4	16	[⊙ 6]	1831	1861	1854	E. by N. ½ N. N'd to W. by S. ½ S.	Harbor light; octagonal frame tower, whitewashed, on pier of protection behind east pier of entrance to harbor; small temporary light on east pier-head forms range for entering harbor.
481	...	[illegible]			[illegible]					
482	13	White	40	48	[⊙ 4]	1836	1857	1857	E. by N. ½ N. N'd to W. by S. ½ S.	Lake-coast harbor light; tower of brick on west pier of entrance to Black River, white washed; elevated walk above pier connects tower with [illegible]. No dwelling.
483	11	White	[illegible]	[illegible]	[illegible]	1847	1859	[illegible]	E. by N. ½ N. N'd to W. S. W.	Harbor light; frame beacon painted white on pier of protection behind west pier of entrance to Vermillion River. No dwelling.
484	12	White	40	48	[⊙ 4]	1835	1857	1857	E. by S. N'd to N. W. ½ W.	Harbor light; cast-iron tower painted white, on pier of protection behind west pier of entrance to Huron River, elevated walk fifty-one hundred [illegible] connects with shore. No dwelling.

OHIO AND MICHIGAN.

Number	Distance visible in statute miles	Color of tower or vessel	Height of tower from base to focal plane	Height of light above sea level	Order of lens	When built	When rebuilt	When refitted	Compass-range of [illegible]	[illegible]
485	12	White	21	38	[⊙ 5]	1830	1862	.....	S. E. ½ E. N'd to N. N. W.	Lake-coast and harbor light; keeper's dwelling of limestone with light on top; east side of entrance to Sandusky Bay.
486	11	White	16	26	[81 ⊙]	....	1867	..	S. W. ½ W. N'd to N. E. ½ E.	Light on keeper's dwelling; frame dwelling painted white, the outer face painted to traverse the light at pleasure, stands in five (5) feet of water on an isolated shoal, and is surrounded by pier of protection. Forms a range N. 37° E. with Cedar Point light for crossing outer bar.
487	14	White.....	55	60	[⊙ 4]	1831	.....	1858	S. S. E. E'd and N'd to N. W. by W. ½ W.	Lake-coast and harbor light; dwelling and tower detached of rubble masonry and whitewashed, situated on extreme eastern point of peninsula on north side of entrance to Sandusky Bay.
488	14	Gray.....	43	57	[⊙ 4]	1854	1864	.....	Entire horizon ..	Lake-coast light; dwelling and tower attached of limestone, Marblehead S. E. ½ E. 10 m., mouth of Detroit River N. W. by N. ½ N. 30 miles.
489	13	Gray.....	44	51	[⊙ 4]	1847	.....	1857	Entire horizon ..	Lake-coast light; dwelling and tower attached of limestone, 12 miles east of Maumee River; Green Island S. E. by E. ½ E. 14 miles.
490	13	Yellow.....	44	50	[⊙ 4]	1831	1867	1857	Entire horizon ..	Lake-coast and harbor light; dwelling and tower attached, of Milwaukee brick, natural color, situated upon south and west end of Turtle Island, nine (9) miles distant from Toledo, Ohio; West Sister, E. ½ S. 12 miles; mouth of Detroit River N. E. by N. 18 miles.
491	10	White	12	18	[⊙ 6]	1868	.....	.....	S. W. ½ W. N'd to N. W. ½ N.	Frame structures, painted white; the outer ones travel on short railways. These ranges mark the channel from the bay into Maumee River. Care must be taken not to mistake the middle range—*both lights of which are visible* for the outer and inner ranges, which are composed of white lights.
492	11	White	21	28	[⊙ 6]	1868	.....	.....	.....	
493	10	White	12	18	[⊙ 6]	1868	.....	.....	S. W. by S. ½ S. N'd to N. W. by W. ½ W.	
494	11	White	21	26	[⊙ 6]	1868	.....	.....	.....	
495	11	White	12	24	[⊙ 6]	1868	.....	.....	N. N. W. E'd to E. N. E.	
496	11	White	21	32	[⊙ 6]	1868	.....	.....	.....	
497	12	White	36	42	[⊙ 4]	1849	.....	1867	S. S. W. N'd and E'd to N. N. E.	Frame tower, painted white, [illegible]
498	14	White	42	52	[⊙ 4]	1838	.....	1855	.....	Detached tower of rubble [illegible]
499	12	White	34	33	[⊙ 6]	1849	1866	1867	N. E'd and S'd to W. by S.	Keeper's dwelling frame, painted white, with light on top; pile foundation.
500	12	White	29	33	[⊙ 6]	1849	1857	1867	W. by N. N'd and E'd to S. by W.	Keeper's dwelling frame, painted white, with light on top; pile foundation.
501	13	White	45	47	[⊙ 5]	1838	.....	1867	S. 56 W. by S. to E. 56 N.	Rubble masonry tower, whitewashed. Keeper's dwelling detached. A guide to Lake St. Clair and the Detroit. Watch the light abeam, steer E. N. E. 1½ mile, then N. E. ½ N. 18 miles, which should bring the south in buoys on the left and the lights in range; bearing N. E. by E., with these in range, stand into the channel between the buoys.
502	13	Yellow.....	37	44	[⊙ 4]	1859	.....	.....	Entire horizon ..	A white light. Tower connected to keeper's dwelling, both of Milwaukee brick, on a pier foundation. On [illegible] north entrance of the cut of artificial channel, which can be entered from 2 to 8 miles from the light-house.
503	11	Yellow.....	23	28	[⊙ 5]	1859	.....	.....	.....	Small tower of Milwaukee brick, on pier foundation. With preceding, forms a range to enter the cut.

OHIO AND MICHIGAN—Continued.

Number.		Name.	Location.	Latitude. N	Longitude. W	Number of lights and relative positions.	Fog signal.	Fixed or revolving, &c.	Interval of flash.
504		*ST. CLAIR FLATS, new straight cut; lower light.	On the port side of lower entrance to "new cut"	.....	.....	1	.....	F	.....
505		UPPER LIGHT	On the port side of the upper end of "new cut."	.....	.....	1	.....	F	.....
506		Fort Gratiot	At the head of St. Clair River, Michigan.	42 00 22	82 24 44	1	.....	F. V. F.	2.00
507		Point aux Barques	On eastern side of entrance to Saginaw Bay, Michigan.	44 01 23	82 47 10	1	.....	F	.....
508		Tawas (Ottawa)	On Ottawa Point, northwest shore of Saginaw Bay, Mich.	44 18 35	82 26 15	1	.....	F., white, varied by red flashes.	1.30
509	LAKE HURON.	Charity Island	At the mouth of Saginaw Bay, Michigan	44 02 10	83 26 05	1	.....	F	.....
510		Saginaw Bay	At the mouth of Saginaw River, Michigan.	43 38 38	83 51 54	1	.....	F	.....
511		Saginaw Range, front				1	.....	F	
512		Rear				1	.....	F	
513		Sturgeon Point	On the western shore of Lake Huron, [illegible] north of Harbor Beach	44 42 49	83 16 00	1	.....	F	
514		Thunder Bay Island	On Thunder Bay Island, north side of entrance to Thunder Bay, Mich.	45 02 17	83 11 13	1	.....	A bell struck by machinery	Rev'g	1.30
515		PRESQUE ISLE HARBOR, front light.	.....	.....	.....	1	1,000 feet apart, L. and W.	F	.....
516		REAR LIGHT	.....	.....	.....	1	.....	F	.....
517		Presque Isle	About 25 miles northwest of Thunder Bay [illegible]	45 21 30	83 29 10	1	.....	F	.....
518		Spectacle Reef	On Spectacle Reef to the west of the entrance to the Straits of Mackinac, Lake Huron	.....	.....	.....	.....	.....	.....
519	LAKE HURON.	Bois Blanc	On the north side of Bois Blanc Island, in the Strait of Mackinac, Michigan	45 46 35	84 24 36	1	.....	F	.....
520		Cheboygan	On the island opposite to Bois Blanc Island, marking the eastern entrance to the Straits of Mackinac, Michigan	45 40 [illegible]	84 24 36	1	.....	F. V. F.	1.30
521		McGulpin's Point	Near Old Mackinac, in the Strait of Mackinac, on the southern side of the entrance to Lake Michigan	45 47 13	84 45 49	1	.....	F	.....
522		Detour	At the mouth of the river Sault Ste. Marie, Lake Huron, Michigan	45 57 20	83 54 22	1	.....	A horn	F	.....

* Two temporary lights in place of those building.

OHIO AND MICHIGAN—Continued.

Number	Distance visible in statute miles	Color of tower or structure	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks
504										Building on lower end of pier, south side of new cut
505										Building on upper end of pier, on south side of new cut.
506	16	White	76	82	[3]	1825		1862	S. by E. by E. ¼ to N. 22 W.	Marks entrance from Lake Huron into St. Clair River. Sand Beach Point, N. by W., 60 miles; Cove Island light (Canada) N. by E., 165 miles; Point Clark (Canada) N. N. E. ¼ E., 62 miles; Goderich (Canada) N. E. by N., 63 miles.
507	16	Yellow	79	88	[3]	1847	1857		N. 56 W. by E'd to E. 34 S.	Coast light and marks the turning point for vessels entering Saginaw Bay; Sturgeon Point light bears N. N. W. 54 miles; Thunder Bay Island light, N. by W. ½ W. 73½ miles; Point Clark light (Canada) E. ¼ N. 53 miles; Chantry Island light (Canada) N. E. by ½ E. 76 miles.
508	14	White	45	54	[5]	1853		1856	N. 45 E. by E. by S. to S. 31 W.	Brick tower, white-washed; keeper's dwelling of brick, detached. This light is on the eastern point of the entrance to Tawas Bay; a sand flat extends 1½ mile to the southward and westward from the light; Charity Island light bears south 15½ miles; Point Douglass (Canada) E. ¼ N. 92 miles; Cape Hurd (Canada) N. E. ½ E. 108 miles.
509	13	White	39	45	[⊙ 4]	1857			S. 11 W. by N. to E. 34 S.	This light is on the north point of the island, from which shoals extend from N. W. to N. E. The main channel is to the westward of the light. Strangers should not attempt to pass to the eastward of the light; Ottawa Point light bears north 15½ miles; Saginaw Bay light-house S. W. ¾ S. 34½ miles.
510	15	White	64	72	[⊙ 4]	1841		1863	N. 55 W. by N'd to E.	This light is on the west side of Saginaw River, near its mouth. Vessels bound into the river, when in 3 fathoms water, should bring the light to bear S. by W. about 3½ miles distant, and steer that course for the red can buoy at the north entrance of the cut, which is 6,800 feet long and 195 feet wide, ranging S. ½ W. and N. ½ E. Both banks are marked by buoys, between which a vessel must be steered towards the mouth of the river; Sand Point bears N. E. ½ E. 29 miles; Point aux Gres, N. by E. ¾ E. 25 miles. Building.
511					[⊙ 6]					
512					[⊙ 6]					
513	15	Yellow	65	69	[⊙ 3½]	1869			S. 11 W. by E'd to S. 5 W.	Tower and keeper's dwelling connected, built of Milwaukee brick. Thunder Bay Island light bears N. by E. 23 miles; Point aux Barques light, S. S. E. ¼ E. 54 miles; Goderich (Canada) S. E. ¼ E. 104 miles; Cove Island light (Canada) N. E. by E. ¼ E. 87 miles.
514	14	White	56	59	[⊙ 4]	1832		1857	Entire horizon	On the S. E. point of the island. Vessels must not attempt to pass to the westward of this light; Middle Island bears N. N. W. ¾ W. 12 miles; Sturgeon Point light, S. by W. 24 miles; Great Duck Island (Canada) N. by E. ¼ E. 43 miles; Cove Island light (Canada) E. N. E. ½ E. 74 miles.
[illegible]	11	White	16	18	[⊙ 6]	1870			N. 71° E. by S. to E. 22 S.	Front light in wooden tower; rear light on keeper's frame dwelling. In approaching the entrance to the harbor, when in 7 fathoms water, bring the two lights in range, and run in on that line to the anchorage.
516	12	White	25	36	[⊙ 6]	1870				
517	19	Red	100	123	[⊙ 3]	1840	1870		S. 52° W. by E'd to N. 67° W.	A coast light on the northern point of the peninsula. The buildings consist of a tower of red brick, with a keeper's dwelling attached, of Milwaukee brick. The Detour light bearing N. N. W. ¾ W., 48 miles; the east point of Isle Bois Blanc, N. W. ¾ W., 52 miles; Spectacle Reef, N. W. ½ W., 44 miles; the center of the Great Duck (Canada) N. E. ¾ E., 31½ miles.
518					[⊙ 2]					Building
519	14	Yellow	38	53	[⊙ 4]	1839	1867		W. 11 N. by N. to E. 40 S.	Keeper's dwelling of Milwaukee brick, with tower attached; a guide to the north channel of Mackinac; the Detour light bearing E. N. E. 26 miles; the south point of Garden City Reef, N. E. by E. ¼ E., 11½ miles; Spectacle Reef, E. S. E. ¾ E., 13½ miles; Fort Mackinac, W. N. W. ¼ W., 9½ miles.
520	12	White	33	37	[⊙ 5]	1851	1859		W. 11 N. by N. to E. 6 S.	Light on keeper's wooden dwelling. Marks entrance into the south channel of the Straits of Mackinac. The south point of Isle Bois Blanc bears north, and the channel opposite the light is 3 miles wide. Old Fort Mackinac on the main, N. W. by W. ¼ W., 10½ miles.
[illegible]	18	Yellow	38	102	[⊙ 3½]	1868			W. 22 S. by N. to E.	Tower of Milwaukee brick, with keeper's dwelling attached. To mark turning point in Straits of Mackinac, 2½ miles west of Old Fort Mackinac, and a guide through the straits. The channel abreast of the light is 3 miles wide; the South Graham Shoal, N. E. ¼ E., 4½ miles; Isle of St. Helena, N. W., 6 miles; Waugoshance, W., 15½ miles.
[illegible]	15	White	70	75	[⊙ 3]	1847	1861	1870	N. 22 E. by S'd to W. 11 S.	Iron pile structure. Keeper's dwelling wood, painted white. Marks entrance from Lake Huron into St. Mary's River. The south point of Garden City Reef, W. S. W. ¼ W., 11½ miles; Spectacle Reef, S. W. ¼ S., 17 miles; Bois Blanc light, W. S. W., 26 miles; Cheboygan light, S. W. ¼ W., 31½ miles; Presque Isle light, S. S. E. ½ E., 47½ miles; Chantry Island light (Canada) S. E. ¼ E., 160 miles; Goderich (Canada) S. E. by S., 190 miles.

MICHIGAN AND INDIANA.

Number.	Name.	Location.	Latitude north.	Longitude west.	Number of lights and relative positions.	Fog-signal.	Fixed or revolving, &c.	Interval of flash.
			° ′ ″ N	° ′ ″ W.				m. s.
521	Waugoshance	On Waugoshance shoal, at the Straits of Mackinaw, and near the entrance to Lake Michigan.	45 47 13	85 4 [illegible]	1	A bell struck by machinery.	F. V. F.	1.30
524	Skilligalee, (Beaux Gallets)	On the Skilligalee Rock (Beaux Gallets) 8 miles S. S. W. ¼ W. from Waugoshance light, and 6 miles from the mainland, Michigan.	45 [illegible] 34	85 [illegible] 46	1	A horn sounded at intervals of 5 minutes.	F	
525	Beaver Island Harbor	On the north point of the entrance to the harbor.	45 44 [illegible]	85 [illegible]	1		Red	
526	Beaver Island	On the south end of Beaver Island, Lake Michigan.	45 44 [illegible]	85 34 50	1		F. V. F.	1.00
527	South Fox Island	On the extreme south-east end of South Fox Island, Michigan.	45 [illegible] 45	85 [illegible] 30	1		Red, F. V. F	
528	LAKE MICHIGAN. Grand Traverse	On the west point of Grand Traverse Bay, Michigan.	44 [illegible] 24	85 24 30	1		F	
529	Mission Point	[illegible]	[illegible]	[illegible]	1		F	
530	South Manitou	On South Manitou Island, [illegible] Lake Michigan.	45 [illegible]	86 [illegible] 29	1	A bell struck by machinery.	F	
[illegible]	Long Lake	[illegible] Bear Series, 2 miles west of West Manitou Island, [illegible] Lake Michigan.	44 [illegible]	[illegible]	[illegible]		F. V. F	1.30
[illegible]	Manistee	[illegible] Manistee river [illegible] Lake Michigan.	44 [illegible]	[illegible]	[illegible]		F	
[illegible]	Grand Haven Pierhead	[illegible]	43 [illegible] 25	86 [illegible] 00	[illegible]		F	
534	Lake Michigan	[illegible]		[illegible]	1		Fixed	
535	Muskegon	[illegible]		[illegible]	1		F	
536	Grand Haven	[illegible]	43 [illegible] 27	[illegible] 34 33	1	A bell struck by hot air engine.	F. V. F	1.30
537	Black	[illegible]			[illegible]			
538	Holland (Black Lake)	[illegible]			1		Fixed	

MICHIGAN AND INDIANA—Continued.

Number.	Distance visible in statute miles.	Color of tower or vessel.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When relighted.	When refitted.	Compass range of visibility.	Remarks.	Interval of flash.
											m. s.
523	15	Yellow	65	74	(◎) 4	1851		...	Entire horizon	Keeper's dwelling and lower part of the tower RED; upper part of the tower YELLOW. Marks Waugoshance shoal and turning point at western end Straits of Mackinac. St. Helena reef, N. E. by E. ¾ E., 1¾ miles; the southwest end of Martin's Pavement shoal, N. ¼ E., 12 miles; the east end of Simmon's reef, N. N. W. ¼ W., 10¼ miles; White Shoal, N. W. ¼ N., 4½ miles; Gray's reef, W., 5¼ miles; Hog Island reef, W. S. W. ¼ W., 12¼ miles; Skillagalee light, S. S. W. ¼ W., 8 miles.	1.30
524	18	Yellow	100	106	(◎) 4	1869	1867	1867	Entire horizon	A brick tower, dwelling detached, all of Milwaukee brick. A guide to and from the Straits of Mackinac, 5½ miles from the Michigan shore, reefs extend from the light, N. W., 11 miles, and N. E. by E. ¾ E., 14 miles. The east end of Hog Island reef bears W. N. W., 8½ miles; the east end of Gray's reef, N. ¼ W., 5¼ miles.	....
525	12	White	34	37	(◎) 4	1856	1859	1859	E. 11 N. to E. 11 S. 22 E.	Brick tower and dwelling. A guide to anchorage Beaver harbor. Shoal gulch light bears E. by S. ¾ S., 1¾ miles. This course would pass 2 of a mile south of Hog Island reef. Hog Island reef, E. ¾ S., 7¾ miles. The entrance to Little Traverse Bay, S. E., 31 miles.	.....
526	18	Yellow	40	103	(◎) 4	1851	1858	1858	E. 11 S. to S. S. W. 11 N.	A guide through the passage between the Beaver and North Fox Islands. This channel is 9¾ miles wide. The Grand Traverse light, S. ¾ E., 25 miles. The South Fox Island light, S. W. ¼ W., 18 miles. Pilot Island light, W. S. W., 67 miles. Rock Island light, W. by S., 67 miles.	1.00
527	13	Yellow	58	68	(◎) 4	1866	...	...	N. 34 W. to S. 4 N. 34 E.	A guide through the passage, 18 miles wide, between South Fox and North Manitou Islands. From the light a bank extends south 2¼ miles, which is from 1½ to 1¾ miles wide; the soundings are from 1 to 6 and 8 fathoms. To the east south, and west of the bank there is from 20 to 30 fathoms of water. Close to, on the bank, there are two small shoals, bearing, respectively, from the light S. by W., 4¼ miles with 14 feet, and S. ¼ W., 7¾ miles with 16 feet. Grand Traverse light, S. E. ¼ E., 20 miles; the northwest point of North Manitou, S. W. ¾ S., 20 miles; Pottawatomie light (Rock Island) W. ¼ N., 48 miles.	....
528	12	Yellow	34	40	4	1858	1858	1858	W. 22 S. by N. to E. 45 S.	Light on keeper's dwelling. Shows position of Cat Head Point, and is a guide to Grand Traverse Bay and to the passages between the Manitou and Sleeping Bear. The N. E. point of the North Manitou W. by S. 24 miles. Pilot Island light, W. ¼ N., 67 miles.	....
529	13	White	45	48	4	1856			N. S. W. to E. E.	Light on keeper's frame dwelling. A guide into the east and west arms of Grand Traverse Bay. Reef extends from this point northward 1½ mile. Northport N. 32 W., distant 11½ miles. Elk Rapids S. 25 E., distant 7 miles.	....
530	15	Yellow	55	64	4	1858	1858	1858	N. 34 E. by E. & S. to W. 34 S.	Light on keeper's dwelling. Guide to anchorage of South Manitou harbor, and showing the passage between it and the east shore of Lake Michigan. The narrow channel between the North and South Manitou Islands, 3 miles wide. Point Betsie light, S. by W. ¼ W., 24 miles. Sleeping Bear, S. by E. ¼ E., 5½ miles.	1.30
531	14	Yellow	40	44	4	1858	...	...	N. 45 E. by N. & W. to S.	Pilot Island light, N. W. ¼ N., 45 miles. Cana Island light, N. W. ¼ W., 10 miles.	....
532	14	White	34	44	5	1870	...	...	N. 14 E. by W. 1 to S. 05 W.	Light on keeper's wooden dwelling, painted white. Guide to entrance of Manitowoc harbor. Cana Island light, N. N. W. ¼ W., 69 miles. Manitowoc light, W. by S., 67 miles. Sheboygan light, S. W. by W. ¼ W., 29 miles. Grand Point au Sable, S. W. ¼ S., 37 miles.	....
533	18	Yellow	100	106	3	1855	...		N. 31 E. by W. to S. 41 E.	Tower of Milwaukee brick. Keeper's dwelling detached, top of lantern black. Point au Sable, S. ¾ W., 29 miles. Cana Island light, N. by W. ¼ W., 76 miles. Manitowoc light, W. ¼ N., 37 miles. Sheboygan light, W. S. W. ¼ W., 25 miles.	....
534	11	White	29	36	4	1872	...	...	...	Wooden tower on the end of the south pier. A guide into the harbor.	....
535	14	White	57	45	4	1857	1870	...	N. W. to W. S. 24 E.	Light on keeper's frame dwelling on south side of Muskegon River. A guide to the artificial cut into Lake Muskegon. Twin Rivers, N. W. ¼ W., 76 miles. Kenosha, S. W. ¼ W., 75 miles.	1.30
536	17	White	34	70	4	1857	...	1873	N. to W.	Light on stone and brick tower, which is connected with the keeper's dwelling. A coast and harbor light marking entrance to Grand Haven. Manitowoc light, N. W., 100 miles. Milwaukee, S. W., W. ¼ S., 87 miles; Racine, W. S. W. ¼ W., 8 miles; Chicago, S. W. ¼ S., 120 miles. Michigan City, S. by W. ¼ W., 100 miles. St. Joseph light, S. by W., 68 miles.	....
537	....	.....	...	...				...	....		
538	11	White	29	34	5	1870	...	...		Wooden tower on the end of south pier. A guide into the harbor of Holland.	....

MICHIGAN AND INDIANA—Continued.

Number.		Name.	Location.	Latitude. N.	Longitude. W.	Number of lights and relative positions.	Fog signal.	Fixed or revolving, &c.	Interval of flash.
									m. s.
539	LAKE MICHIGAN.	Kalamazoo	On the north side of the mouth of Kalamazoo River, about 40 miles N. by E. ¼ E. of St. Joseph's, Michigan.	...	...	1	...	F	...
540		St. Joseph's	On the south side of the mouth of St. Joseph's River, Michigan.	...	...	1	...	F V. F	0.30
541		Beacon	On the south pier	...	...	1	...	F	...
542		Michigan City	At the south end of Lake Michigan, Indiana.	41 43 23	86 54 20	1	...	F	...
543		Chicago	On the north pier of Chicago harbor.	41 53 25	87 36 56	1	...	F	...
544		Beacon	On the end of the north pier and a guide to the entrance to the harbor of Chicago.	...	...	1	...	F	...

WISCONSIN AND MICHIGAN.

Number.		Name.	Location.	Latitude. N.	Longitude. W.	Number of lights and relative positions.	Fog signal.	Fixed or revolving, &c.	Interval of flash.
545	LAKE MICHIGAN.	Little Fort (or Waukegan)	On south side of Little Fort River, about 15 miles south of Southport light, Illinois.	42 21 29	87 50 00	1	...	F	...
[illegible]		Kenosha (Southport)	On Wareham Island, in Southport, and on the north side of the entrance to the pier harbor, Wisconsin.	[illegible]	[illegible]	[illegible]	...	F V F	1 30
547		Beacon	On the north pier	...	...	1	...	Fixed	
548		Racine (Root River)	On the North Harbor pier, at Racine, Wisconsin.	42 46 00	87 48 00	1	...	F	...
549		Milwaukee	At north point of Milwaukee Bay, Wisconsin.	43 02 24	87 54 08	1	...	F. V F	2 00
550		Beacon	On the North Harbor pier at Milwaukee.	43 01 37	87 53 56	1	A bell	F	...
551		Port Washington	At Port Washington, 25 miles south of Sheboygan light, Wisconsin.	43 23 00	87 52 40	1	...	F	...
[illegible]		Sheboygan	On a point 2½ miles north of the mouth of Sheboygan River, Wisconsin.	[illegible]	87 [illegible]	1	...	F	...
[illegible]		Manitowoc	Near the inner end of the north pier, at the mouth of Manitowoc River, Wisconsin.	44 [illegible]	87 36 00	1	...	F. V F	1 30
[illegible]		Bayley's Harbor (rear light)	On western side of mouth of Bayley's Harbor, Wisconsin.	44 [illegible]	[illegible]	1	1,000 feet apart N. 28° W. S. 28° E.	F	...
[illegible]		Bayley's Harbor (front light)						F	...
556		Cana Island	On Cana Island, 12 miles S. W. of the south entrance to Green Bay, Wisconsin, and 4 miles to the northward of entrance to Bayley's Harbor.	[illegible]	87 02 00	1	...	F	...
557		North Bay (front)	...	...	...	1	...	F	...
558		North Bay (rear)	...	...	...	1	...	F	...
559		Porte des Morts	On Pilot Island, at the south entrance to Green Bay, Michigan.	[illegible]	[illegible]	1	A horn operated by a hot air engine	Rev	1 00

MICHIGAN AND INDIANA—Continued.

Number.	Distance visible in nautic miles.	Color of tower or vessel.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks.
539	14	White	35	53	[◇ 5]	1852	1859	1870	N. by W. to S. 11 E.	Light on keeper's wooden dwelling. Guide to harbor of Kalamazoo; Muskegon light, N. ¼ W. 40 miles; Sheboygan light, N.W. 106 miles; Milwaukee light, W. N. W. ¼ W. 90 miles; Racine, W. ¼ N. 82 miles; Chicago, S. W. ¼ W. 90 miles; Michigan City light, S. S. W. ¼ W. 75 miles.
540	17	White	85	90	[◇ 4]	1831	1859	.....	N. 22 E. by W. to S. 34 W.	Light on keeper's wooden dwelling. Sheboygan, N.W. by W. ¼ W. 129 miles; Milwaukee, N.W. ¼ W. 97 miles; Chicago, W. SW. ¼ 62 miles; N. E. ¼ N. 35 miles from Michigan City.
541	12	White	29	34	[◇ 6]	1831	1870	1870	.....	Wooden tower on the end of the south pier.
542	14	Yellow	34	5	[◇ 5]	1837	1858	.....	N. 45 E. by N. to W. 11 S.	A guide into the river. Light on keeper's dwelling. Grand Pointe au Sable, N. ¼ E. 165 miles. This course would pass 3 miles to the westward of Little Point au Sable. Sheboygan, N. by W. ¼ W. 146 miles; Waukegon, N.W. ¼ W. 65 miles; Chicago, W.N.W. ¼ W. 39 miles.
543	16	Black	72	83	[◇ 3]	1859	.....	.....	N. 11 W. by E. to S. 22 E.	Iron tower; keeper's house white. Grand Pointe au Sable, N E. by E. ¼ E. 160 miles; Pilot Island, N. ¼ E. 240 miles; Manitowoc, N. ¼ E. 154 miles.
544	12	White	35½	[◇ 6]	1869	.....	.....	.....	.....	Wooden tower marks end of pier and guides into the harbor.

WISCONSIN AND MICHIGAN.

Number.	Distance visible in nautic miles.	Color of tower or vessel.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When rebuilt.	When refitted.	Compass range of visibility.	Remarks.
545	15	White	35	75	[◇ 5]	1849	1860	1860	N. 22 E. by E. to S. 22 E.	Light on keeper's dwelling. Grand Haven, N.E. by E. ½ E 97 miles; Petite Pointe au Sable, N.E. ¼ N. 110 miles; Point Betsey, N. N.E. ½ E. 182 miles.
546	15	Yellow	55	76	[◇ 4]	1848	1866	.....	N. 11 E. by E. to S. 10 E.	Brick tower connected with keeper's dwelling. St. Joseph's, S.E. by E. ½ E. 76 miles; Grand Haven, E. N.E. 89 miles; South Manitou, N.N.E. ½ E. 193 miles. This course would pass 4½ miles to the westward of Point Betsey light.
547	10	White	30	39	[◇ 6]	1848	1867	1870	.....	Wooden tower on the end of the north pier. A guide into the harbor.
548	13	Yellow	36	48	[⊙ 4]	1866	.....	1870	N. 30 E. by E. to S. 15 E.	Coast and harbor light. 1¼ miles east of this light is a shoal, extending south 1 mile, least water, 8 feet; Muskegon, N. E. by ½ E., 84 miles; Grand Pointe au Sable, N. E. ¾ N., 112 miles.
549	18	Yellow	28	102	[⊙ 4]	1855	.....	.....	N. by E. to S. 11 E.	Coast light. Yellow brick tower and dwelling. A guide to Milwaukee Bay. Muskegon, E. by N., 81 miles; Petite Point au Sable, N. E. by ½ E. 83 miles.
550	13	Yellow	36	48	[⊙ 3½]	1866	.....	.....	.....	A guide to the entrance to the harbor, between the piers.
551	18	Yellow	40	113	[⊙ 4]	1849	1860	1870	N. 34 E. by E. to S.	Keeper's dwelling of Milwaukee brick, with lantern on top. Point Betsey, N. E. ¼ N., 123 miles. Grand Haven, E. S. E. ½ E., 97 miles.
552	16	White	34	80	[⊙ 5]	1839	1860	.....	N. 34 E. by E. to S.	Light on keeper's frame dwelling. East of the light and the piers there is a reef, on N. and S. ends of which buoys are placed. The South Manitou, N. E. ¼ N., 123 miles. Twin River Point, N. ½ E., 33 miles.
553	14	White	34	63	[⊙ 5]	1839	.....	1859	E. 40 N. by E. to S. 11 W.	Muskegon, S E., ¼ E., 89 miles. Manistee, E. ¼ N., 67 miles.
554	8	White	.....	.....	[⊙ 6]	1869	.....	1870	S. 19 E. to S. 37 E.	Rear light on keeper's frame dwelling, front light in wooden tower, at 4 miles distance from the entrance to the channel leading to the anchorage; bring the lights in range bearing N. N. W. ¼ W., and stand into the bay for anchorage. Sleeping Bear Point, E. by S., 51 miles. The old white tower of the former light on the point, on the starboard side of the entrance, is still standing, and serves as good day-mark for approaching the harbor.
555	12	White	24	39	[⊙ 5]	1869	.....	1870	.....	
556	16	Yellow	80	88	[⊙ 3]	1869	.....	.....	N. 16 E. by E. to S. 25 W.	Tower and dwelling, of Milwaukee brick, connected. Light on South Fox Island bears E. by N. ¼ N., 62 miles; South Point of South Manitou Island, E. ¼ S., 45 miles; Point Betsey, S. E. by E. 48 miles, and the Bayley' harbor entrance 4 miles to the southward.
557	.....	.....	.....	.....	[⊙ 6]	.....	.....	.....	.....	Building.
558	.....	.....	.....	.....	[⊙ 6]	.....	.....	.....	.....	
559	12	Yellow	34	38	[⊙ 4]	1849	1858	.....	E. 22 N. by E. to S	Light on keeper's dwelling. To enter Port du Mort from Lake Michigan, bring the light at 5 miles distance, in 19 or 20 fathoms water, to bear from W. by W. to N. N. W. ¼ W., and steer for it until the light bears N. 1½ miles distant then N. W. ½ W., 5 miles, into Green Bay. This course will pass south of Plum Island. Strangers should not attempt to pass north of Plum Island. The N. E. shore of the peninsula of Green Bay and Washington Island are fringed with rocky shoals, requiring a vigilant look-out and use of the lead. South Beaver light bears E. by N. ½ N., 68 miles; South Fox Island light, E. ¼ N., 53 miles.

WISCONSIN AND MICHIGAN—Continued.

Number.		Name.	Location.	Latitude. N.	Longitude. W.	Number of lights and relative positions.		Fog signal.	Fixed or revolving, &c.	Interval of flash.
				° ′ ″	° ′ ″					
560	LAKE MICHIGAN.	Pottawatomie	On the north point of Rock Island, north side of the entrance to Green Bay, Michigan	45 25 40	86 49 36	1			F	
561		Point Peninsula	On the point between Little and Big Bays de Noquet	45 40 05	86 57 44	1			Rev'g	0.30
562		Escanaba	At the east inner end of Sand Point in Little Bay de Noquet.	45 44 23	87 02 26	1			F	
563	GILLEN BAY.	Eagle Bluff	Two miles north of Fish Creek, in Green Bay.	45 10 00	87 14 09	1			F	
564		Chambers's Island	On the northwest end of Chambers' Island, in Green Bay.	45 12 41	87 20 09	1			F. V. F.	1.00
565		Green Island	On the S. E. point of Green Island, off Menominee River, Green Bay	45 03 15	87 30 00	1			F	
566		Tail Point	Near the mouth of Fox River, at the head of Green Bay Wisconsin.	44 35 49	87 59 48	1			F	
567	LAKE SUPERIOR.	Round Island	In White Fish Bay, near entrance to river Ste. Marie	46 26 36	84 31 34	1			F	
568		Point Iroquois	On south shore of White Fish Bay, Lake Superior	46 29 05	84 37 51	1			Rev	
569		White Fish Point	On White Fish Point, Michigan	46 46 18	84 57 21	1		Alberta	F	
570		Grand Island	North point of Grand Island, on a high bluff.	46 33 40	86 40 50	1			F. V. F.	1.30
571		Grand Island Harbor	On the low sand point projecting from Grand Island into the east entrance to Grand Island Harbor.			1			F	
572		Grand Island Harbor range, (front light.)	On the main land at west entrance to Grand Island Harbor.			1	500 ft. apart.		F	
573		Grand Island Harbor range (rear light.)	On the main land at west entrance to Grand Island Harbor.			1			F	

WISCONSIN AND MICHIGAN—Continued.

Number	Distance visible in statute miles.	Color of tower or vessel.	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When built.	When relighted.	When refitted.	Compass range of visibility.	Remarks.
560	19	Gray	34	137	(⊙) 1	1839	1858	1875	S. 22 W. by N. to E. 11 S.	Light on keeper's dwelling. A guide to Green Bay through the passage between Rock and St. Martin's Islands. A 10-foot shoal in the channel bears N. E. by E. ½ E., 3¾ miles from the light. From the S. E. point of Rock Island there are two dangerous reefs, with only 4 feet water, bearing S. E. by E. ½ E., 2¾ miles, and S. S. E., 3¾ miles. Vessels from Lake Michigan for Green Bay can bring the light to bear, in 18 fathoms water, from W. by N. to W. by S., and stand for it, hauling ½ a mile to the northward as they approach the light; with the light a-beam, when standing to the westward. Boyer's Bluff, the N. W. point of Washington Island, one of the most prominent headlands in Green Bay, will bear W. by S., 5½ miles.
561	12	Yellow	36	11	(⊙) 4	1865	....	1870	E. 22 N. by S. to N. 22 W.	Tower and dwelling of Milwaukee brick. Marks approach to Little and Big Bays de Noquet. A dangerous shoal extends south from the light 1½ mile, on which there is a red spar buoy. There is also a 11-foot spot, S. by W. ¾ W., 2¼ miles from the light, on which there is a third-class iron can buoy, painted with red and black horizontal stripes. Sand Point light-house bears N. W. by W., 6½ miles; Chambers's Island light-house, S. S. W. ¾ W., 37½ miles; Boyer's Bluff, S. ½ E., 17 miles; south point of Poverty Island, S. E. ½ E. 17 miles.
562	13	Yellow	40	11	(⊙) 4	1867	....	.	N. 11 W. by E. to S. 11 W.	A guide into the harbor of Escanaba and Little Bay de Noquet. To the eastward of the light is a sand flat, extending a half mile, on which is a black buoy. Boyer's bluff, S. by E. ½ E., 23 miles; Whale's Back Shoal, S. S. W. ¼ W., 23 miles.
563	15	Yellow	38	76	(⊙) 3½	1868	....	....	E. 15 N. by N. to N. 22 W., also S. 22 W. to W. 25 S.	A guide through the Strawberry Passage, between the islands and the main shore. Strangers should not attempt to pass between the Strawberries and Chambers's Island. Horseshoe Reef, N. by E. ½ E., 3¾ miles. Eagle Harbor to the northward of the bluff is a good harbor of refuge.
564	15	Yellow	48	68	(⊙) 4	1868	....	....	E. 22 N. by N. to W. 34 S.	A guide through the western passage (5½ miles wide) between the island and the main. A reef extends off the north point of the island 1½ miles. Strangers should not pass to the eastward of this island, or between it and the Strawberries. Horseshoe Reef, E. ½ N. 7½ miles; Whale Back Shoal, N. E. ½ N. 11 miles; Point Rocheceau, N. N. W. ¾ W., 7 miles; Menominee, S. W. by W., 13 miles.
565	15	White	40	55	(⊙) 4	1868	....	..	Entire horizon except W. to N. W.	Light on keeper's dwelling, of brick. Reefs extend off from the S. E. and N. W. points of this island a ½ and 1 mile, respectively. The best channel (6 miles wide) is to the eastward of this island. The N. W. end of Chambers's Island bears N. E. by N. ½ N. 11 miles. The S. E. point of Peshtigo Shoal, S. W. by S. ¾ miles; Sturgeon Bay, S. by E. ½ E. 11 miles.
566	14	White	56	56	(⊙) 4	1848	1859	....	N. 22 E. to E. 22 E.	Light on keeper's dwelling, of wood. A guide to the entrance of Fox River, Green Bay City. The S. E. extreme of Peshtigo Reef, N. E. ½ N. 3¾ miles; Hat Island N. E. 48 miles
567	13	White	35	50	(⊙) 5	1855	....	1870	E. 34 N. by N. to W. 22 S.	Light on square stone tower, rising from the keeper's dwelling. A guide to and from the entrance to Lake Superior.
568	15	Red	55	72	(⊙) 4	1857	1870	1870	S. 45 E. by N. to W. 22 N.	The light is on a red brick tower, connected with the keeper's dwelling. A guide to and from the Straits of St. Marie. Parisien Island, N by W. ½ W. 12 miles; White Fish Point, N. W. ¾ N. 25 miles.
569	15	White	70	76	(⊙) 3	1847	1861	1861	S. 11 W. by E. and N. to W.	Iron-pile structure. Keeper's house of wood, and painted white. A guide to and from White Fish Bay, at the S. E. extreme of Lake Superior. The southwest point of the shoal off Caribou Island bears N. W. ¼ W. 55 miles; Manitou Island, W. N. W. ¼ W. 131 miles; Montreal Island, (Canada,) N. by E. ½ E. 37½ miles.
570	23	Yellow	33	205	(⊙) 4	1850	1867	....	E. by N. to W. 22 S.	Stannard's Rock Beacon, N. W. by N. ¼ N. 49½ miles; Manitou Island light, N. W. ¼ N. 73 miles. This course would pass 3½ miles to the southward and westward of Stannard's Rock Beacon. Granite Island light, W. N. W. ¼ W. 36 miles; Marquette light, W. ¼ S. 33 miles; the S. W. point of Michipicoten, N. N. E. ¼ E. 85 miles; Pointe au Sable, E. N. E. ¼ E. 27 miles.
571	12	White	30	34	(⊙) 5	1868	....	1869	N. E. to E. N. E.	To guide through the eastern passage to the anchorage at Grand Island Harbor.
572	10	White	19	23	(⊙) 6	1868	....	1870	N. to N. 22 W.	Front light in wooden tower. Rear light on keeper's frame dwelling. These lights are a guide for entering the west channel to the anchorage of Grand Island Harbor. With the north point of Wood Island, bearing W. ¼ of a mile, and the lights in range, steer S. by E. ½ E. 5 miles, toward the range lights. At this point a vessel should be about ¼ of a mile north of the lights, and should have opened the two extreme south points of the island; then haul to the eastward for the respective anchorages, keeping Powel's Point close aboard.
573	11	White	22	31	(⊙) 6	1868	....	1870	.....	

WISCONSIN AND MICHIGAN—Continued.

Number.		Name.	Location.	Latitude.	Longitude.	Number of lights and relative positions.		Fog signal.	Fixed or revolving, &c.	Interval of flash.
				N.	W.					m. s.
574	LAKE SUPERIOR.	Marquette	On the north point of Marquette Harbor.	46 32 55	87 22 12	1			F	
575		Granite Island	On Granite Island, 12 miles northwest of Marquette.	46 43 22	87 24 25	1			F. white, var'd by red fl'shs.	1.30
576		Huron Island	On West Huron Island, off Huron Bay.	46 57 47	87 50 35	1			F	
577		Portage River	Near mouth of Portage River, western shore of Keweenaw Bay.	46 58 41	88 24 33	1			F. white, var'd by red fl'shs.	2.00
578		Portage Range, (front light.	On prolongation of center line of cut from Keweenaw Bay.			1	500 ft. apart.		F	
579		Portage Range, (rear light.)				1			F	
580		Manitou	On the east point of Manitou Island.	47 25 12	87 35 38	1			F. V. F	1.30
581		Gull Rock	On a rocky islet between Keweenaw Point and Manitou Island.	47 25 02	87 40 11	1			F	
582		Copper Harbor	On the eastern point of the entrance to Copper Harbor Michigan.	47 28 34	87 52 00	1		A horn	F	
583		Copper Harbor Range, front light.	On Fort Wilkins reserve	47 28 10	87 52 26	1	500 feet apart.		F	
584		Copper Harbor Range, rear light	Ditto	47 28 05	87 52 26	1			F	
585		Eagle Harbor	On the west point of the entrance to Eagle Harbor, Michigan.	47 28 50	88 04 04	1			F. V. F	2.00
586		Eagle River	Near the entrance to Eagle River, south shore of Lake Superior.	47 25 03	88 18 07	1			F	
587		Ontonagon	At mouth of Ontonagon River, Michigan, on west side of entrance.	46 52 15	89 31 00	1			F	
588		Michigan Island	On the southwest point of Michigan Island, the most southern and eastern of the Apostle Group, Wisconsin.			1			F	
589		La Point	On Chaguamegan Point, the southeastern entrance to La Pointe Harbor, and to the southward of Bayfield.			1			F	
590		Raspberry Island	On the southwest point of Raspberry Island, one of the Apostle Group.			1			F. V. F	1.30
591		Minnesota Point	At the head of Lake Superior, mouth of St. Louis River. 1 mile N. W. of the piers.	46 46 00	92 14 00	1			F	

WISCONSIN AND MICHIGAN—Continued.

Number.	Distance visible in statute miles.	Character (color of vessel).	Height of tower from base to focal plane.	Height of light above sea level.	Order of lens.	When lighted.	When relighted.	When extinguished.	Compass bearing of visibility.	Remarks.
574	16	Yellow	34	77	[⊙ 4]	1854	1866	1870	270	House and tower connected, east of Milwaukee Bay. Stannard's Rock B. from N. E. by E. to Grand Island, inclusive, E. N. 13 miles.
575	17	Granite	34	93	[⊙ 4]	1868	....	....	Entire horizon	Keweenaw Point N. by W. W. 18 miles. Traverse Point N. W. W. 18 miles. Stannard's Rock, N. by E. E. 42 miles.
576	22	Granite	34	197	[⊙ 3d]	1868	....	....	Entire horizon	Stannard's Rock, N. N. E. 40 miles. Manitou Island, N. N. E. E. 10 miles. Traverse Island, N. W. E. W. 12 miles.
577	15	White	45	68	[⊙ 5]	1856	....	....	N. by E. by E. to S. 11 W.	Manitou Island, N. N. E. E. 12 miles. Stannard's Rock, E. N. E. E. 8 miles.
578	10	White	19	21	[⊙ 6]	1868	....	....	....	To pick up Portage River from the western shore of Keweenaw Bay. Front white wood tower. Rear light on keeper's dwelling.
579	11	White	23	25	[⊙ 6]	1868	....	....	....	
580	16	White	70	81	[⊙ 3]	1849	1861	1867	Entire horizon, except from W. 11 N. to W. 11 S.	Iron pile structure, connected with keeper's house, of wood painted white. Stannard's Rock, S. E. 20 miles. S. W. point of Michipicoten, E. N. E. ¾ E., 75 miles; the south point of Isle Royal, Canada, N. by E. E. 8 miles; the Battery Rocks, N. by W., W. [illegible] Point, S. of Point of Isle Royal, N. W. ¼ N. [illegible]
581	13	Yellow	39	50	[⊙ 4]	1867	....	....	Entire horizon, except from E. 22 by N. to E. 16 S.	Tower and keeper's dwelling connected, located at Milwaukee Bay. A guide through the ship channel between Gull Rock (which lies near the western end of Manitou Island) and Keweenaw Point.
582	15	Yellow	36	65	[⊙ 4]	1848	1866	....	E. 5 N. by W. to W. 5 N.	Tower and keeper's dwelling connected, built of Milwaukee brick. S. W. point of Isle Royal, W. N. W., 68 miles; Otter Head, (Canada,) N. E. by E. ¾ E., 92 miles. Passage Island N. N. W. ¾ W., 58 miles.
583	10	White	16	22	[⊙ 6]	1865	....	....	....	
584	12	White	26	39	[⊙ 6]	1865	....	....	....	To pick up Copper Harbor. The tower is on a wooden [illegible] on keeper's house.
585	13	White	30	47	[⊙ 5]	1850	....	1856	E. 11 N. by N. to W.	Light on keeper's dwelling. The entrance to Les Petites Bayes Bay (Canada,) N. N. E. ¾ E., 23 miles; the north point of the outer or eastern island, Apostle Group, W. by S. S. [illegible] miles.
586	14	Yellow	24	61	[illegible]	1858	....	....	E. 15 N. by N. to W. 11 S.	Light on keeper's dwelling. A guide to the pier. Siskowit Island, N. N. W. ¾ W., 41 miles; Michigan Island light, W. S. W. ¼ W., 100 miles.
587	13	Yellow	39	47	[⊙ 5]	1852	1869	....	E. 45 N. by N. to W. 11 S.	Horn and tower of Milwaukee brick. The S. W. point of Isle Royal, N. ¾ E., 65 miles; Gull Island, Bay of Canada, N. by W., 7 miles.
588	19	White	64	129	[illegible]	1850	....	1869	E. 22 N. by N. to W. 22 N.	A guide through the passage between Mackinac, Stockton and Michigan Islands to Bayfield and Le Pointe. Outer [illegible] E., 6 miles.
589	13	White	34	42	[illegible]	1858	....	....	E. 26 N. to E. 2 S.	Light on keeper's dwelling, of wood painted white. Black River E., N. 22 miles. Lake River E. N. E., 7 miles.
590	16	White	47	77	[illegible]	1862	....	....	E. 22 N. by N. A. to W. 2 N.	Light on keeper's house dwelling, painted white. A guide between the Main and Raspberry Island and to Bayfield and Le Pointe. Bapteson River, N. W., W., 3 miles. A guide into Superior Bay. The S. W. point of Isle Royal, N. E. by E. ¾ E., [illegible] Point Porphyry, Canada, N. E. ¾ E., 12 miles.
591	14	Red	45	50	[illegible]	1857	....	....	E. 22 S. by N. to N. 27 W.	

Table of distances at which objects can be seen on the lakes, according to their respective elevations and the elevation of the eye of the observer.

Heights in feet.	Distances in statute miles.	Distances in nautical miles.	Heights in feet.	Distances in statute miles.	Distances in nautical miles.	Heights in feet.	Distances in statute miles.	Distances in nautical miles.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	250	20.916	18.14
10	4.184	3.628	75	11.456	9.935	300	22.912	19.87
15	5.124	4.443	80	11.842	10.26	350	24.748	21.46
20	5.916	5.130	85	12.196	10.57	400	26.457	22.94
25	6.614	5.736	90	12.549	10.88	450	28.062	24.33
30	7.245	6.283	95	12.893	11.18	500	29.580	25.65
35	7.826	6.787	100	13.228	11.47	550	31.024	26.90
40	8.366	7.255	110	13.874	12.03	600	32.403	28.10
45	8.874	7.696	120	14.490	12.56	650	33.726	29.25
50	9.354	8.112	130	15.084	13.08	700	35.000	30.28
[illegible]	[illegible]	[illegible]	140	15.652	13.57	800	37.416	32.45
60	10.216	8.886	150	16.201	14.05	900	39.836	34.54
65	10.625	9.240	800	18.708	16.22	1,000	41.873	36.28

If the distance at which a light of a given height can be seen by a person on a given level be required, it is only needful to add together the two numbers in the column of distances corresponding to those in the column of heights, which represent respectively the height of the observer's eye and the height of the focal plane above the sea. When the height required to render a light visible at a given distance is required, we must first seek for the number corresponding to the height of the observer's eye, and deduct this from the whole proposed range of the light, and opposite the remainder, in the column of distances, seek for the corresponding number in the column of heights.

Distances corresponding to heights, not included in the above table, may be found by the formula, $d = \sqrt{\frac{3}{2} H}$, in which d is the distance in statute miles, and H is the height of the focal plane above the lake. One statute mile = 0.867 of a nautical mile.

	Statute miles.
EXAMPLE 1. Detour light, 75 feet high, visible	11.456
Add for height of observer's eye, on deck 10 feet	4.184
Distance of light	15.640
EXAMPLE 2.—Presque Isle light, 128 feet high, visible	14.96
Add for height of observer's eye, on deck 10 feet	4.184
Distance of light	19.144

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ST. LAWRENCE RIVER.

Number.	Name of light.	Place.	Latitude. N. ° ′ ″	Longitude. W. ° ′ ″	Number of lights and relative position.		Fixed, flashing, fix and flash int., alt., revolving.	Interval of revolution or flash.
41	CHANE ISLAND	1½ miles from west point of island	47 3 0	70 33 0	1		F.	
42	BELLE CHASSE	East point of island	46 56 0	70 46 0	1		F.	
42a	ST. LAWRENCE POINT	Orleans Island	46 50 0	71 2 0	1		F.	
43	ST. ANTOINE	South shore	46 39 43	71 36 10	1		F.	
44	ST. CROIX	On shore, near high-water mark, and a quarter of a mile N. of church.	46 37 45	71 44 10	1		F.	
45	PORT NEUF	On north shore, three-quarters of a mile off the river.	46 41 48 N. light.	71 52 10	2	S.W. and N.E. nearly 180 yards apart.	F.	
46	PLATON POINT	On south side, 1½ miles below Richelieu Island.	46 39 13 N. light.	71 53 3	2	S. 72 W. 169 yards apart.	F.	
47	RICHELIEU	Center of island	46 38 24	71 54 51	1		F.	
48	LANGLAIS POINT	On south shore, half a mile below Great Chene River.	46 35 5	71 59 35	1		F.	
49	CAPE CHARLES	On the cape	46 33 39	72 4 15		N. 67 W. 80 yards apart.	F.	
50	GRONDINE	North shore	46 35 49	72 4 12	2	S. 66 W. 1350 yards apart.	F.	
51	ST. PIERRE DES BECQUETS	South shore summit of St. Pierre Point	46 30 28	72 12 30	1		F.	
52	BATISCAN	North shore, 1½ miles below Batiscan church.	46 30 16 S. light.	72 14 52	2	S. 73 W. 922 yards apart.	F.	
53	CHAMPLAIN	North shore, near Champlain church	46 26 34	72 20 32	1		F.	
54	CAPE MADELEINE	Lower lights, north shore, 3 miles below the cape.	46 23 46 S. light.	72 27 18	2	S. 60 W. 200 yards apart.	F.	
55	CAPE MADELEINE	Upper lights, north shore, 2 miles below the cape.	46 23 16 W. light.	72 28 38	2	S. 85 W. 235 yards apart.	F.	
56	ST. FRANCIS PORT	South shore, high light on a pier	46 16 20 W. light.	72 37 15	2	S. 76 W. 3,240 yards apart.	F.	
57	POINT DU LAC	North shore	46 16 50	72 40 22	1		F.	
58	ST. PETER'S LAKE. East	Light vessel, in lake	46 15 56	72 42 18	1		F.	
59	ST. PETER'S LAKE. Center	Light vessel, S. S E. 2½ miles from Rivière de Loup	46 11 39	72 53 20	1		F.	
60	ST. PETER'S LAKE. Western	Light-vessel, N. side of channel, N.E. by N. 3 miles E. on Flat Island.	46 9 39	72 56 50	1		F.	
61	Isle aux Raisins	On the island	46 6 14	72 57 50	1		F.	
62	Isle aux Raisins	South part of island	46 6 0	72 58 0	1		F.	
63	STONE OR ISLE A LA PIERRE	East part of island	46 5 54	72 59 40	1		F.	
64	LA VALLIER	South side of island	45 52 55 S. light	73 16 0	2	S. 38 W. 320 yards apart.	F.	
65	TRAVERSE	2½ miles above Contrecœur	45 49 52 N. light.	73 17 0	2	S. 28 W. 1,500 yards apart.	F.	
66	ISLE AUX PRUNES	Opposite Verchères	45 46 50	73 22 30	1		F.	
67	REPENTIGNY	Three quarters of a mile below Repentigny.	45 45 2 N. light.	73 26 8	2	S. 22 W. 170 yards apart.	F.	
68	ISLE A LA BAGUE	On the islet	45 44 14	73 26 5	1		F.	
69	ST. THÉRÈSE	On the island	45 41 22 N. light.	73 27 40	2	S. 50 W. 220 yards apart.	F.	
70	POINTE AUX TREMBLES	North shore	45 38 26 E. light.	73 29 20	2	S. 46 W. 600 yards apart.	F.	
71	MONTREAL	On Island wharf	45 30 22	73 33 14	2	S. 41 W. 73 yards apart.	F.	
72	LACHINE	On pier at entrance of canal, north shore	45 27 0	73 41 0	1		F.	
73	LAKE ST. LOUIS	Light-vessel, four fifths mile above Lachine.	45 26 30	73 42 10	1		F.	
74	LAKE ST. LOUIS	Light-vessel, 2½ miles above Lachine	45 25 40	74 44 15	1		F.	
75	RIVER OTTAWA. Claire Point	Light-vessel, south side of channel, two thirds of a mile above Dewal from light No. 3 on St. Lawrence River near Claire Point.	45 24 30	73 45 20	1		F.	
76	RIVER OTTAWA.	On shoal, north side of channel, about 1½ miles below Point Claire, 14 miles westerly from light-ship near Point Claire.			1		F.	
77	RIVER OTTAWA. Green Shoal	On pier, south side of channel 7 miles below Ottawa city			1		F.	
78	CHATEAUGUAY	Light-vessel, 4½ miles above Lachine	45 24 0	73 49 18	1		F.	
79	BEAUHARNOIS	Lower entrance of canal south shore	45 18 45	73 56 27	2	N. 61 E. 414 yards apart.	F.	
80	GROSSE POINT	Upper entrance of Beauharnois canal	45 15 35	74 9 25	2		F.	
81	OFF GROSSE POINT	On piers in river			2		F.	

ST. LAWRENCE RIVER.

Number.	Miles seen in clear weather.	Time harbor light is shown.	Color or any peculiarity of light-house.	Height in feet, center of lantern, above high water.	Height in feet of building from base to vane.	Year lighted.	Character and order of illuminating apparatus.	Remarks.
41	10	All night when navigation is open.	Wood	44	37	1862	C	
42	13		do	70	30	1862	C	
42a	8		White	38		1869	C	
43	10		Wood; white	96		1858		
44	6		do	30	20	1842		A small light, to assist in keeping the channel for some distance, up and down the river.
45	5		Both stone and white; the lower lantern is on roof of house.	200 120		1842		These lights in one lead up Richelieu channel to the light on Richelieu Island.
46	12		Wood; octagonal; white.	152	24	1816		These lights lead up the Richelieu.
47	6		Octagonal; stone	130 27	7 	1824 1816		This light and the lights on Platon Point are very nearly in the same line of bearing, namely, E. by N. ½ N.
48	5		Wood	35	8	1844		To show off Battures des Grondines and to avoid Battures Cordin, and as a steering point for Richelieu.
49	4		do	110	20	1856		Lead to and from Cap à la Roche and Cape Charles, and to answer as a steering point through Richelieu.
50	5 each		Octagonal; wood; white.	50 25	30	1857		To lead off Cap à la Roche to Levrard.
51	5		do	85	12	1844		To indicate the widest berth of Cap à la Roche.
52	3	All night when navigation is open.	do	39	31	1844		To lead through Levrard and clear Batture St. Ann on the south, and Pouillier on the north.
53	4		do	20	11			
54	4		do	30 53	10 13	1844 1843		Steering point for lower part of Bay of Champlain.
55	6		do	33 55	10 30	1843		To clear Batture Bigot.
56	3 each		High and low, wood; octagonal; white.	35 31 12	10 21 4	1839		To clear Pouillier Provenché. These lights in one with the eastern light vessel on lake leads up through the dredged channel W. by S. ¼ S. High light removed in winter.
57	12		do	71	24	1843		Shows the turn of channel at Point due Lac.
58	6		Red	15	8			Removed at the approach of winter on account of ice. On south side of Petite Traverse, off Rivière du Loup.
59	6		do	15	8	1816		Removed at the approach of winter on account of ice. To indicate the turn of the channel and lead to No. 2.
60	6		do	15	8	1828		In connection with Isle à la Pierre, and bearing in line with No. 1, and to avoid Battures St. François and à la Carpe.
61	6		do	30	20	1843		To lead from entrance of the Batture of Lake St. Peter to No. 1 light-vessel, up and down.
62			do			1863		
63	6		do	30				
64	7		do	21	17	1831		Indicate entrance to channel and lead to No. 1.
65			Wood; white; square	13	9	1858		Leads to channel called Flat Islands.
66			Octagonal; wood; white.			1866		To lead into La Valtrie channel and Isle Bouchard, and indicates the new channel to be kept in line till La Valtrie lights are brought to bear.
67	4	All night when navigation is open.	Wood; white	30 14	26 14	1843		To clear the island. To lead through Isle à le Bague channel, and to avoid Pouilier on the north and shoal on the south.
68	4		Wood; white; octagonal.	24	1	1831		The island is extremely low. Removed in winter on account of ice.
69	4		Wood; white; square.					Leads to entrance through Vercheres channel, up and down the river.
70	6 4		High and low, octagonal; wood; white.	53 25		1846		To lead through the channel between Point aux Trembles and Varennes up to Longue Point.
71	4 each		Wood; octagonal	38	31	1830		RED lights. Indicates the deepest channel to and from the harbor.
72	6		Square; wood; white.	29 23	21 17	1849		
73	6		Circular; iron; red	20		1849		
74	6		Red	20				
75	6		Iron	21	17			
76	7		Wood	29	25			
77	9		do	36	17			
78	6		Red	20		1846		
79	10		Wood, square frames			1850		In one lead to Chateauguay light.
80	8		Square; wood	20	20	1845		To be kept in one when leaving the canal, till the upper lights come in one.
81	3		Square; wood; red and white.			1850 1850		

ST. FRANCIS LAKE.

Number	Name of light.	Place.	Latitude.	Longitude.	Number of lights and relative position.		Fixed, flashing, fix and flash int., alt., revolving.	Interval of revolution or flash.
			N. ° ′ ″	W. ° ′ ″				
82	COTEAU DU LAC	North shore, at head of rapids in village	45 16 30	74 11 45	1			
83	MCGEE'S POINT	North shore	45 12 25	74 19 10	1		F.	
84	CHERRY ISLAND	South side of north channel	45 7 0	74 24 18	1		F.	
85	CHERRY	Light-vessel above island	45 8 20	74 25 40	1		F.	
86	CRIB	North side of channel, on a pier 4 miles S.W. from Lancaster village.	45 5 25	74 30 30	1		F.	
87	CORNWALL CANAL		45 1 15	74 55 25	1		F.	

BETWEEN ST. FRANCIS AND ONTARIO LAKES.

88	COLES SHOAL	On pier, 5 miles west of Brockville, three-quarters of a mile from north shore.			1		F.	
89	GRENADIER ISLAND	S.W. point of island, north side of channel, 2 miles below Rockport.			1		F.	
90	LYNDOCK ISLAND	N.W. point of island, south side of channel, five miles west of Rockport.			1		F.	
91	GANANOQUE NARROWS	N.E. end of Little Stave Island, south side of channel, 5 miles below Gananoque.			1		F.	
92	JACK STRAW SHOAL	On a pier, north side of channel, 3 miles below Gananoque.			1		F.	
93	SPECTACLE SHOAL	On pier, north side of channel, 2 miles west of Gananoque.	44 16 0	76 22 30	1		F.	
94	RED HORSE ROCK	On pier, S.E. side of channel, one-half of a mile west of No. 92.			1		F.	
95	BURNT ISLAND	S. E. point of island, north side of channel, three-quarters of a mile from No. 93.			1		F.	
96	WOLFE ISLAND	N.E. entrance point of island, 18 miles S. E. of Kingston	44 14 0	76 10 40	1		F.	

ONTARIO LAKE.

97	KINGSTON	S.E part of town	44 13 30	76 29 0	1			
98	SNAKE ISLAND	On pier on bar, north side of channel, 5 miles W. of Kingston.	44 11 30	76 33 0	1		F.	
99	GAGE OR SIMCOE	S.W. point of island, Yeo Point, 9 miles west of Kingston.	44 9 0	76 33 0	1		F.	
100	FALSE DUCKS	East point of island	43 57 0	76 49 0	1		F.	
100*a*	PLEASANT POINT	Entrance to Quinte Bay	44 5 0	76 54 0	1		F.	
101	PETER POINT	On point	43 51 0	77 8 30	1		Rev.	Every minute and forty seconds.
102	SCOTCH BONNET OR EGG ISLAND.	On small island, 1 mile S.W. of Nicholson's Island.	43 54 0	77 33 0	1		F.	
103	PRESQUE ISLE	East point	44 1 0	77 41 0	1		F.	
104	PRESQUE ISLE	On a hill in shore	44 0 0	77 42 0	2	W. S.W. and E. N.E. nearly.	F.	
105	COBURG	Pier head	43 57 0	78 9 0	1		F.	
106	PETER ROCK OR GULL ISLAND.	W. by S. 4 miles from Cobourg	43 56 30	78 13 0	1		F.	
107	HOPE PORT	Pier head, east side	43 56 15	78 15 0	1		F.	
108	DARLINGTON	Pier head	43 52 30	78 38 30	1		F.	
109	OSHAWA PORT	Pier head	43 52 0	78 47 0	1		F.	
110	WHITBY HARBOR	West pier	43 51 0	78 57 0	1		F.	
111	PICKERING OR LIVERPOOL	East pier head	43 48 45	79 2 0	1		F.	
112	TORONTO	Gibraltar Point, S.W. side of point, 1½ miles south of Toronto.	43 37 0	79 23 30	1		F.	
113	TORONTO	Queen's wharf, western part; the other on arm of pier.	43 38 10	79 23 45	2		F.	
114	CREDIT PORT	On pier	43 33 30	79 35 0	1		F.	
115	OAKVILLE	Pier head	43 26 45	79 40 30	1		F.	
116	BURLINGTON BAY	South pier of entrance	43 18 0	79 48 30	2		F.	
117	DALHOUSIE HARBOR	East pier head	43 13 30	79 15 30	1		Rev.	

ST. FRANCIS LAKE.

Number.	Miles seen in clear weather.	Time harbor light is shown.	Color or any peculiarity of light-house.	Height in feet, center of lantern, above high water.	Height in feet of building from base to vane.	Year lighted.	Character and order of illuminating apparatus.	Remarks.
83	.....	All night when navigation is open.	On top of a house....	20	14	1848	.....	Not lighted since 1863.
84	10		Square; wood.....	39	24	.....	.....	Midway between Coteau and Cherry Island.
85	.....		.....do	40	30	1847	.....	
86	8		.....	.....	.....	1849	.....	
			Square; wood	30	20	1841	.....	Opposite the light there is a beacon N. of the channel.
87	.....	.....	.....	.....	.....	1865	.....	

BETWEEN ST. FRANCIS AND ONTARIO LAKES.

88	6	All night when navigation is open.	White; square; wood.	33	31	1856	C	These small lights are for the purpose of marking out the channel through the Thousand Islands between Brockville and Kingston.
89	10		.....do	55	37	1856	C	
90	7		.....do	40	26	1856	C	
91	7		.....do	44	37	1856	C	
92	6		.....do	31	29	1856	C	
93	9		.....do	28	26	1856	C	
94	8		.....do	28	26	1856	C	
95	10		.....do	64	26	1856	C	
96	.....		.....do	.....	.....	1856	C	

ONTARIO LAKE.

97	.....	.....	.....	.....	.....	1844	.....	Not lighted. Latitude of court-house at Kingston, 44° 14′ 0″ N.; longitude 76° 28′ 38″ W.
98	6	.....	Stone; square.....	35	35	1858	.....	
99	15	.....	Round; stone	45	40	1833	.....	RED light.
100	22	.....	.....do	68	62	1828	.....	
100a	10	.....	.....	.....	.....	1851	.....	
101	21	.....	Round; stone	62	60	1833	.....	
102	12	.....	Stone	51	54	1856	C	
103	18	All night when navigation is open.	Octagon; stone	67	63	1840	.....	
104	3		.....	.....	.....	1851	.....	
105	8		Square; wood; white.	20	16	1844	.....	
106	10		Octagon; stone.....	45	48	1840	.....	On a rock 2 miles off shore.
107	4		.....	.....	.....	.....	.....	
108	4		On a stone house.....	.....	.....	.....	.....	RED facing south; BRIGHT facing east and west.
109	.....		.....	.....	.....	1863	.....	
110	5		Square; wood.....	12	8	1844	.....	
111	.....		.....	.....	.....	1863	.....	
112	18		Hexagonal; stone....	66	62	1820	.....	
113	6		Wood; square; red..	22	16	1838	.....	RED light is on the arm of the pier, to be passed closely on port hand. Variation in 1870, 3° 0′ W.
114	.....		.....	.....	.....	1863	.....	
115	12		Octagon; wood.....	42	36	1836	.....	
116	15		One white, one red; square; octagon.	60	54	1838	.....	High light, RED.
	4			18	14	1845	.....	
117	10		Wood	53	44	1852	.....	Entrance to Welland Canal.

ERIE LAKE.

Number.	Name of light.	Place.	Latitude.	Longitude.	Number of lights and relative position.		Fixed, flashing, fix and flash inc., alt., revolving.	Interval of revolution or flash.
			N. ° ′ ″	W. ° ′ ″				
118	COLBORNE PORT AND RANGE LIGHT.	West pier head	42 53 30	79 17 0	2	.....	F.	.....
119	MOHAWK ISLAND	On an island between Colborne and Maitland ports, 1 mile S.W. of mainland.	42 50 40	79 35 0	1	.....	Rev.	Every three minutes.
120	MAITLAND PORT	West pier	42 52 0	79 37 45	1	.....	F.	.....
121	DOVER PORT	West pier	42 47 30	80 13 0	1	.....	F.	.....
122	LONG POINT OR NORTH FORELAND.	East extremity	42 33 24	80 5 30	1	.....	F.	.....
123	BIG OTTER CREEK OR BURWELL PORT.	333 yards in shore	42 39 0	80 49 30	1	.....	F.	.....
124	CATFISH CREEK OR BRUCE PORT.	.....	42 40 0	81 1 0	1	.....	F.	.....
125	STANLEY PORT	Extreme of W. pier	42 40 0	81 12 30	1	.....	F.	.....
126	PELÉE ISLAND	N. E. point	41 50 0	82 37 45	1	.....	F.	.....
127	PELÉE SPIT	On Caisoon, 2¼ miles southerly from extreme end of point from north shore.	41 52 20	82 29 45	1	.....	F.	.....

DETROIT RIVER.

128	AMHERSTBURGH	Bois Blanc Island, south point	42 5 0	83 6 36	1	.....	F.	.....

ST. CLAIR LAKE.

129	THAMES RIVER	Mouth of river, south shore	42 18 0	82 36 0	1	S. 26 E. and N. 26 W. 450 yards apart.	F.	.....

HURON LAKE.

130	GODERICH	On high bank, S. of entrance to harbor. Two on N. pier.	43 44 33	81 43 6	2	.....	F.	.....
131	CLARK POINT	North shore, about 20 miles N. E. from Goderich	44 4 10	81 43 42	1	.....	Fl.	Half minute.
132	CHANTRY ISLAND	South side, about 2¼ miles west from Saugeen.	44 29 40	81 23 20	1	.....	F.	.....
133	GEORGIAN BAY. Isle of Coves	N.E. point of island, entrance to Georgian Bay.	45 10 40	81 43 44	1	.....	Rev.	Two and a half minutes.
134	GEORGIAN BAY. Griffith Island	N.E. end of island, 20 miles from Owen Sound.	44 40 45	80 42 2	1	.....	F.	.....
135	GEORGIAN BAY. Nottawasaga Island	About 4 miles N.W. from Collingwood.	44 32 30	80 8 0	1	.....	Fl.	Half a minute.
136	GEORGIAN BAY. Collingwood	Breakwater pier	44 31 0	80 12 35	1	.....	F.	.....
137	GEORGIAN BAY. Christian Island	S.E. part of island, 1¼ miles from main land.	44 47 0	79 57 30	1	.....	F.	.....
137a	GEORGIAN BAY. Lonely Island	.....	45 33 0	81 28 0	1	.....	F.	.....
138	GEORGIAN BAY. Red Rock	One mile E. of Killarney, on Red Rock Point.	45 48 0	81 36 0	2	.....	F.	.....
139	GEORGIAN BAY. Partridge Island	1¼ miles N.W. of Red Rock light	45 49 0	81 37 0	2	.....	F.	.....
140	GEORGIAN BAY. Range Lights	Shaftsbury, or Little Current	45 59 0	82 4 0	2	.....	F.	.....
141	GEORGIAN BAY. Clapperton Island	North point	46 4 0	82 19 0	3	.....	F.	.....
141a	GEORGIAN BAY. Sulphur Island	S.E. side	46 9 0	83 30 0	...	.....	F.	.....

LAKE SUPERIOR.

142	ST. IGNACE	3 miles from St. Ignace Island	48 42 15	88 10 0	3	.....	F.	.....

ERIE LAKE.

Number.	Miles seen in clear weather.	Time harbor light is shown.	Color or any peculiarity of light-house.	Height in feet, center of lantern, above high water.	Height in feet of building from base to vane.	Year lighted.	Character and order of illuminating apparatus.	Remarks.
118	12	All night when navigation is open.	Wood	58	54	1852		Entrance to Welland canal.
119	10		Round; stone	14	10	1848		
				64	60			
120	10		Square; wood; white.			1848		
121	8		do	20	20	1846		Grand River entrance.
122	25		Octagon; wood	65	60	1843		
123	12		do	96	46	1840		
124								
125	4		Lantern	20	20	1844		
126	9		Round; stone	45	40	1833		
127				76	61	1861		W. by N. clears Pelée Shoal.

DETROIT RIVER.

128	12	All night when navigation is open.	Round; stone	56	40	1837		

ST. CLAIR LAKE.

129	12		Square; wood	34	30	1837		The two lights in one lead over the bar.
	6		Stone; round tower	15	15	1845		

HURON LAKE.

130	25		Square tower	150	20	1847		
131	15			87	87	1859	D., 2d ord	
132	15			86	86	1859	D., 2d ord	
133	15			90	85	1859	D., 2d ord	
134	12			130	85	1859	D., 3d ord	
135	10			86	85	1859	D., 2d ord	
136	6			24		1858		
137	8			61	60	1859	D., 4th ord	RED light.
137*a*	20		Square	195	42			
138	10			80	20	1866	C., 3d ord	At north side of channel leading into Killarney harbor.
139	5			30	20	1866	C., 3d ord	
140	6			24		1866	C., 2d ord	
141	8			22				
				35		1866	C., 3d ord	
141*a*	10		Square, white tower.	45	30	1869		

LAKE SUPERIOR.

142	8					1866		*Position uncertain.*